CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- Before this Amendment: Claims 37-41 and 72-82.
- After this Amendment: Claims 37-41 and 72-82.

Non-Elected, Canceled, or Withdrawn claims: 1-36 and 42-71

Amended claims: 37, 72 and 78.

New claims: none

Claims:

1-36.   (Canceled)

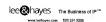**37.   (Currently Amended)** A method comprising:

receiving a query;

mapping the query from a query space to a question space to identify associated frequently asked questions <u>(FAQ)</u>, the mapping comprises:

analyzing a log database to determine a relevance of previously stored frequently asked questions to the query<u>, the analyzing comprises:</u>

<u>iteratively training a search engine using data in the log database,</u> <u>wherein the search engine comprises a query parser and a FAQ matcher;</u>

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deriving weighting factors based on the iterative training, wherein the weighting factors are used to determine the relevance;

identifying a confidence rating which measures a degree of the relevance between the previously stored frequently asked questions and the query; and

ascertaining from the previously stored frequently asked questions the associated frequently asked questions based on the determined relevance;

mapping the associated frequently asked questions from the question space to a template space to identify associated templates;

mapping the templates from the template space to an answer space to identify associated answers; and

returning the answers in response to the query.

38.   (Previously Presented) A method as recited in claim 37, wherein the mapping from the query space to the question space comprises:

parsing the query to identify at least one associated concept; and

correlating the concept to one or more frequently asked questions.

39.   (Previously Presented) A method as recited in claim 37, wherein the mapping from the question space to the template space comprises cross-indexing from a first table containing question identifications to a second table containing

template identifications.

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40.   (Previously Presented) A method as recited in claim 39, wherein the mapping from the template space to the answer space comprises cross-indexing from the second table to a third table containing answer identifications.

41.   (Previously Presented) A method as recited in claim 37, further comprising:

presenting the answers to a user for confirmation as to which of the answers represent the user's intentions in the query;

analyzing the query and the answers confirmed by the user; and

modifying the answers that are returned in response to the query based on information gleaned from the analyzing.

42-71. (Canceled)

72.   (Currently Amended) A method of parsing a search query, comprising:

segmenting the search query into individual character strings, wherein at least one of the individual character strings comprises a single character;

producing a parse tree from at least one parsable character string of the search query; ~~and~~

generating at least one keyword based at least on one non-parsable character string of the search query ; [[,]]

determining a relevance of the parse tree and the at least one keyword to a list of frequently asked questions (FAQ), wherein the relevance is determined

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by a FAQ matcher that has been iteratively trained using data from a log database; and

~~wherein~~ using the parse tree and the keyword ~~are used~~ to return answers to the search query.

73. (Previously Presented) The method of claim 72, further comprising:

conducting keyword searching using the at least one keyword.

74. (Previously Presented) The method of claim 72, wherein the parse tree represents a collection of concepts related to the search query.

75. (Previously Presented) The method of claim 74, further comprising matching the parsed concepts to a list of frequently asked questions.

76. (Previously Presented) The method of claim 75, further comprising:

identifying at least one answer associated with the list of frequently asked questions that match the parsed concepts and keywords; and

presenting the at least one answer to a user in a user interface that permits a user to select a desired answer from the one or more answers.

77. (Previously Presented) The method of claim 76, further comprising:

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logging the search query and at least one answer selected by the user in a log database; and

analyzing the log database to derive at least one weighting factor indicating how relevant the frequently asked questions are to the parsed concepts and keywords.

78. **(Currently Amended)** A parser for a search engine, comprising:

a segmentation module that segments a search query into one or more individual character strings, wherein at least one of the one or more individual character strings comprises a single character;
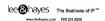
a natural language parser module that produces a parse tree from one or more parsable character strings of the search query; and

a keyword parser to identify one or more keywords in the search query and to output the keyword,

a log analyzer able to derive, over time, various weights indicating how relevant the parse tree and the one or more keyword are to a list of frequently asked questions, wherein the various weights are determined based on iterative training using data from a log database,

wherein the parse tree and the one or more keywords are used to return answers to the search query.

79. **(Previously Presented)** The parser of claim 78, wherein the parse tree represents a collection of concepts related to the search query.

80. (Previously Presented) The parser of claim 78, further comprising a search module that matches the parsed concepts to a list of frequently asked questions.

81. (Previously Presented) The parser of claim 80, wherein the search module:

identifies at least one answer associated with the list of frequently asked questions that match the parsed concepts and keywords; and

presents the at least one answer to a user in a user interface that permits a user to select a desired answer from the one or more answers.

82. (Previously Presented) The parser of claim 81, wherein the search module:

logs the search query and at least one answer selected by the user in a log database; and

analyzes the log database to derive at least one weighting factor indicating how relevant the frequently asked questions are to the parsed concepts and keywords.